



19 April 2002

No Good Deed Goes Unpunished: Using UAA's to regulate effluent-dependent streams.

Federal regulations allow beneficial uses to be downgraded or sub-classified if: *"Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place."* [40 CFR 131.10(g)(3)]. Sometimes called Net Environmental Benefit, this factor is often cited as the basis for reclassifying effluent-dependent streams like those commonly found in the arid west.

This presentation will focus on case examples where the Net Environmental Benefit was used to adopt site-specific water quality criteria for heavy metals and Whole Effluent Toxicity (WET). Several unique concepts will be considered: 1) that UAA's must weigh the loss of riparian habitat against the potential improvements in aquatic habitat where higher treatment costs create an incentive to divert effluent flows; 2) that increasing pressure to reclaim water is creating incentives to divert rather than discharge flows after applying advanced waste treatment; 3) water conservation programs designed to protect environmental resources are increasing the ionic strength of some effluents creating incentives to abandon the conservation effort; 4) groundwater remediation programs often have trouble passing WET tests due to ionic interference, UAA's are necessary to allow the clean-up to continue without violating stream standards.

**AUTHOR:**

Timothy F. Moore  
Risk Sciences  
1417 Plymouth Drive  
Brentwood, TN 37027  
Ph: (615) 370-1655  
Fax: (615) 370-5188  
tmoore@risk-sciences.com

Mr. Moore is the co-author of the Water Environment Research Foundation (WERF) guidance document on conducting Use-Attainability Analysis and a principal investigator on the Arid West Water Quality Research Project (EPA-sponsored grant).